



**Governor's STEM Advisory Council
John Deere Des Moines Works
August 15, 2013
1:30 p.m. to 4:30 p.m.**

ATTENDEES (n = 59)

Mary Andringa, Vermeer Corporation
Patrick Barnes, John Deere Moline Technology Innovation Center
Jenny Becker, Rockwell Collins
Carolyn Boss, IBM
Brenda Buzynski, University of Northern Iowa
Kacia Cain, Central Campus
Lynne Campbell, Iowa State University
Lin Chapé, Vermeer Corporation
E. Mark Chelgren, State of Iowa Senate
Robert Denson, Des Moines Area Community College
Sarah Derry, Drake University
Cindy Dietz, Rockwell Collins
Deb Dunkhase, The Iowa Children's Museum
Debi Durham, Iowa Economic Development Authority
David Epley, House Democratic Caucus
Linda Fandel, Office of the Governor
Leslie Flynn, University of Iowa
Michelle Gowdy, DuPont Pioneer
Kate Guess, Vermeer Corporation
Erin Heiden, University of Northern Iowa - Center for Social & Behavioral Research
Cassara Higgins, University of Northern Iowa
James Hoelscher, University of Northern Iowa
Lisa Holtorf, Strategic America
Rachel Hurley, Iowa Biotechnology Association
Leann Jacobson, Technology Association of Iowa
Dave Jacoby, The University of Iowa
Kari Jastorff, Iowa Governor's STEM Advisory Council Administrative Office
Greta Johnson, Office of the Governor
Alissa Jourdan, Kemin Industries, Inc.
Cathann Kress, Iowa State University
Beth Kulow, Southwestern Community College
Bill Lamb, Kirkwood Community College
Gene Lutz, University of Northern Iowa - Center for Social & Behavioral Research

Duane 'D.T.' Magee, Iowa Department of Education
Janet McMahon, Drake University
Valerie Newhouse, Iowa Lakes Community College
Kimberly Reynolds, Lieutenant Governor
Michelle Rich, State Public Policy Group
Kathy Rogotzke, North Iowa Area Community College
Sharon Rosenboom, Northwestern College
William Ruud, University of Northern Iowa
Gary Scholten, Principal Financial Group
Mike Schreurs, Strategic America
Curt Simmons, Science Center of Iowa
Elliott Smith, Iowa Business Council
Jerry Stoner, Strategic America
Catherine Swoboda, The World Food Prize Foundation
Michelle Temeyer, Black Hawk County Extension and Outreach
Tony Thelen, John Deere Intelligent Solutions Group
Tamara Trinder, Mercy Clinics
Steven Triplett, ACT
Kari Webb, Iowa Lakes Community College
Stacie Webster, John Deere Des Moines Works
Jeffrey Weld, Iowa Governor's STEM Advisory Council
Rebecca Whitaker, University of Iowa
Jonathan Wickert, Iowa State University
Becky Wilhovsky, Iowa Governor's STEM Advisory Council Administrative Office
Gail Wortmann, Iowa Learning Online
Isa Zimmerman, IKZ Advisors

1:30-2:05 WELCOMES

Tony Thelen, Director of Operations for John Deere Intelligent Solutions Group hosted the meeting, greeting attendees against the backdrop of Deere's global footprint as an advanced manufacturer heavily reliant on a steady STEM talent pipeline. Exec. Dir. Weld thanked Mr. Thelen and Deere's Stacie Webster on behalf of the Council for hosting, then introduced Council co-chair Lt. Governor Kim Reynolds. Her remarks centered on the year in reflection – the synergy built between educators and business/industry from which innovative STEM solutions have sprung to begin to change Iowa's educational landscape. She introduced co-chair Mary Andringa, President and CEO of Vermeer Corporation. Mary's remarks were future-focused, reminding the Council of this unprecedented opportunity to work together to bring a new era of education to young Iowans, one that unites the culture of school with the broader culture of career in STEM. Following co-chairs' remarks, Weld welcomed State Senator Mark Chelgren to the podium who reflected on his own STEM education as formative in enabling his business development acumen, and the vital role this Council serves in helping companies like his cultivate and recruit top quality employees rather than to seek talent from outside of Iowa.

2:05 – 3:00 Major Initiative Briefings

Kari Webb (STEM Classrooms), Beth Kulow (Scale-Up), and Sarah Derry (STEM PR Campaign) provided briefings that are detailed as part of the meeting document entitled “Major Initiative Briefing” included in this archive. Kari Jastorff presented the financial report for FY2013 as well as the recently approved FY2014 budget, both of which are also archived here. Eight other major initiatives are also summarized in the Major Initiative Briefings document.

3:00 – 3:20 Showcase of a Successful Scale-Up

Joshua Remington, Executive Director of the Iowa FFA Foundation introduced Mr. Matthew Eddy, SE Polk High School Ag. Science instructor who, with the help of six of his students, shared a sample of the CASE (Curriculum in Agricultural Science) program with Council members. CASE is a second-year scale-up exemplar of the Council along with eight other FY2014 exemplary programs rolling out across the state.

3:20 – 4:10 FACILITATED DISCUSSION: YEAR 3 AND BEYOND

Thanks to Steve Triplett, Catherine Swoboda, Kari Webb, Sarah Derry, Lynne Campbell, Beth Kulow, James Hoelscher and Rebecca Whitaker for facilitating discussion groups.

1. Moving forward, what should be a short-term goal for the Council? Long term?

SHORT TERM

- Website: showcase great programs and a one-stop information center for STEM, and define STEM (integration, relevant problem-solving).
- Clear event calendar by region.
- Expand teacher externships and student internships.
- Expand STEM for underserved and underrepresented students.
- Encourage integration of STEM topics into all curricular areas as the Common Core is implemented.
- Roll out STEM Professional Development.
- Maintain connection to 2012-13 Scale-up recipients- share outcomes rpt. with them.
- Community Forums.
- Summer STEM programs for youth.
- Ramp up awareness, including tools for Council member communications.
- More business – school partnership guidance and programming. Especially small and medium businesses – such as volunteer vignettes
- Carry STEM message into community org’s – Rotary, PTA, school boards, etc. (Target groups per month – e.g., School Board awareness month)
- Package the assessment data for wide exposure.

LONG TERM

- Self-sustaining programming---school districts, non-formals, and business involvement to carry on STEM w/o Legislative funding.
- Broadband access for all learners.
- Deliver scale-up to all Iowans.
- Measure progress. (Especially track STEM participants thru to post-secondary.)
- Measure STEM Classroom impact for expansion.
- Fundraising.
- Eliminate silos.
- Engage and educate parents.
- Award and recognize models and exemplars.
- Bring reform to higher education STEM.
- Respond to workforce need – soft skills for e.g.

2. Relatedly, where is a gap in Iowa's STEM portfolio that we need to address?

- Need an innovation incubator fund.
- Develop guidelines for schools to develop STEM classrooms or schools.
- Engage school counselors.
- Engage post-secondary institutions in STEM teacher prep. reform.
- Draw in more underrepresented (i.d. rockstar role models to celebrate).
- Challenge the B.A.- Or-Bust mentality.
- Use STEM to usher in competency-based.
- Youth voice.
- Get schools to integrate STEM subjects.
- A match.com for STEM to match education need with community/bus. resources.

3. What do you believe could be the next "big thing" in STEM education?

- Ag Science credit to satisfy Life Science graduation requirement.
- Computer science credit required for graduation.
- Iowa Learning Online deliver STEM to rural Iowa.
- K-12 + businesses + non-formal + higher ed.
- Rebrand STEM to be cool, creative.
- Get younger youth into industry.
- Army of STEM professionals unleashed to volunteer.
- “STEM dollars” – for participating in STEM Events. Redeemable at State Fair, Zoo, Sci Ctrs., partner vendors.

- Iowa Pride, Iowa Feeds the World, Iowa History.
- STEM'ville app.
- Entrepreneur focus of STEM.

4. How can the Council best use your talents and contributions in the coming year?

- Every Advisory Council member attend/help out at one STEM Council event or program (arranged via regional manager).
- Every Advisory Council member present the STEM Council's programming to at least one audience or constituency ("message map" needed).
- Development of the STEM teaching certificate at our institution.
- Contributing to PR campaign.
- Creating access to data and STEM research.
- Utilize STEM Community Active Learning Partners.
- Support of improved broadband access across Iowa.
- Contribute a "voice" to create awareness.
- Donating space for a meeting (student clubs).
- Market STEM when we market ourselves.
- Host teacher externships.
- Businesses meet with school superintendents to communicate the skills students need.
- Convene superintendents and businesses to talk about workforce needs.

THE GROUPS

A. Beth Kulow

- Pat Barnes
- Rachel Hurley
- Bill Ruud
- Gail Wortmann
- Michelle Gowdy
- Dave Jacoby

B. Kari Webb

- Carloyn Boss
- Leann Jacobson
- Brian Schoenjahn
- Jeneane Beck
- Kate Guess

- Bill Lamb

C. James Hoelscher

- Kacia Cain
- Craig Johnson
- Gary Scholten
- Isa Zimmerman
- Kari Jastorff
- Kim Kerian

D. Rebecca Whitaker

- Lin Chapé
- Alissa Jourdan
- Jenny Becker
- Greta Johnson
- Gene Lutz

E. Lynne Campbell

- Rob Denson
- Valerie Newhouse
- Tamara Trinder
- Brenda Buzynski
- Tom Hobson
- Leslie Flynn

F. Sarah Derry

- Cindy Dietz
- D. T. Magee
- Teresa Wahlert
- David Epley
- Erin Heiden
- Becky Wilhovsky

G. Steve Triplett

- Deb Dunkhase
- Kim Reynolds
- Jonathan Wickert
- Linda Fandel
- Janet McMahonill

H. Catherine Swoboda

- Jeff Herzberg
- Sharon Rosenboom
- Brad Woody

- Bridget Godes
- Cathann Kress
- Mike Schruers

4:10 – 4:30 YEAR 1 INDICATORS and OUTCOMES

Dr. Erin Heiden and Dr. Gene Lutz of the Center for Social and Behavioral Research at the University of Northern Iowa shared highlights of the 2012-13 STEM Monitoring report compiled by the CSBR, the University of Iowa's Iowa testing, and Iowa State University's Research Institute for Studies in Education. The presentation is archived as "Year 1 Report 2013".

4:30

Lt. Governor Reynolds expressed appreciation to meeting host John Deere, to Council members, Network Managers and to Executive Director Weld for all the progress to date, and challenged everyone to exceed expectation in the year(s) to come.

Adjourned 4:35

Notes compiled and submitted by Jeff Weld